

# Limitations of alternative medicine (AM)

Edzard Ernst  
Emeritus Professor  
University of Exeter

# CONFLICTS OF INTEREST:

none

# DR. ERNST's®



**TISANE AMINCISSANTE  
à base de plantes**

**HERBAL TEA FOR WEIGHT  
MANAGEMENT**

LOT 03D01  
EXP03/2008



## 24 Filtrette®

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# Background 1

- My first job as a junior doctor was in a homeopathic hospital
- Later, I worked as a clinician in various areas.
- I also did some basic research and got a PhD.
- Since 1993, I investigated AM full time and published ~ 1000 articles on this subject.

# Background 2

- Many cancer patients try some form of AM(~50% without telling their doctors).
- Millions of websites, hundreds of books and newspaper articles promote AM.
- Conventional clinicians usually know little about AM.
- Patients are often being left alone when deciding about AM-use !!!!!!!!!!!!!

# Confusing terminology

- Alternative medicine AM
- Complementary medicine CM
- CAM
- Holistic medicine
- Natural medicine
- Unconventional medicine
- etc,etc

# What is AM?

An umbrella term for a diverse array of therapeutic (and diagnostic) methods which have little in common other than being 'outside' mainstream medicine.

from

acupuncture

to

urin-therapy

# AM: several common features

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- Emphasis on holism
- 'Natural' treatments
- Concept of 'energy'
- 'Safe' treatments
- Individualisation
- Self-healing properties
- Long tradition of usage
- Private healthcare



# Cancer – recommended AMs

Acupressure	DHEA	Meditation
Acupuncture	Diet	Melatonin
Anti-neoplasms	Enzyme therapy	Metabolic therapies
Antioxidants	Exercise	Mind-body therapies
Aromatherapy	Guided imagery	Naturopathy
Ayurvedic medicine	Green algae	Nutritional supplements
Bioelectric treatment	Herbal medicine	Oxygen therapy
Biofeedback	High dose vitamin E	Pancreatic enzyme therapy
Carotenoids	High fiber diet	Pets
Cell therapy	Homeopathy	Phytoestrogen
Cell-specific cancer therapy	Hydrazine sulfate	Qigong
Chelation therapy	Hydrotherapy	Reflexology
Chinese herbs	Hypnotherapy	Relaxation
Chinese medicine	Hypnotherapy & social support	Shark cartilage
Co-enzyme Q10	Imagery	Spirituality
Coley's toxins	Immune enhancement therapies	TCM
Dance therapy	Juice therapy	Therapeutic touch
Detoxification therapy	Magnetic field therapy	Yoga
	Massage	

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# 1. Prevention

# Allium for cancer prevention

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Design: systematic review

Sample: 20 (mostly) case control studies

Result: "with only 1 exception, these studies suggest that allium vegetables convey a protective effect, in particular from GI cancers."

# Green tea for cancer prevention

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Design: Cochrane review

Sample: 51 (mostly epidemiological) studies with a total of >1.6 million participants

Result: Risk of certain cancers may be reduced by regular green tea consumption

SECOND EDITION



The Desktop Guide to

# COMPLEMENTARY AND ALTERNATIVE MEDICINE

An evidence-based approach



Editors

Edzard Ernst  
Max H. Pittler  
Barbara Wider

Assistant Editor


Kate Boddy

Forewords by

David Eisenberg  
Brian M. Berman

MOSBY  
ELSEVIER

# AM for cancer prevention

Treatment	Weight of evidence	Direction of evidence
Diet		
<i>Allium</i> vegetables	OO	↑ 
Green tea	OO○	↗
Phytoestrogens	O	↗
Vegetarianism	OO	⇒
Herbal medicine		
<i>Panax ginseng</i>	O	↑

**Take home message:  
(prevention)**

**AM offers very little in  
addition to conventional  
healthcare**

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# 2. Treatment



# ALTERNATIVE CANCER CURES...

...there will never be one !!!

# Mistletoe for cancer

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Method: systematic review of RCTs

Sample: 10 RCTs of various mistletoe preparations

Results:

- most RCTs had considerable weaknesses
- flawed RCTs tended to be positive
- none of the stronger RCTs showed efficacy in terms of quality of life, survival or other outcomes

# Laetrile as an 'alternative cancer cure'

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Design: Cochrane review

Sample: no RCT or non-RCT was found

Conclusion: "The claim that Laetrile has beneficial effects for cancer patients is not supported by data..."

# Ukrain for cancer?

Design	Systematic review
Sample	7 RCTs
Result	All suggested extremely positive effects on tumor growth and survival
Conclusion	"...numerous caveats prevent a positive conclusion..."

# AM for Cancer?

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Design: Retrospective chart review (1980 - 2006)

Sample: 185 breast cancer patients who refused standard treatments in favour of AM

Results: exclusive AM-use was associated with 43% 5-year survival compared to 82% in patients who also used conventional treatments

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# 3. Palliative/supportive care

# Palliative/supportive cancer care

## Physical symptoms:

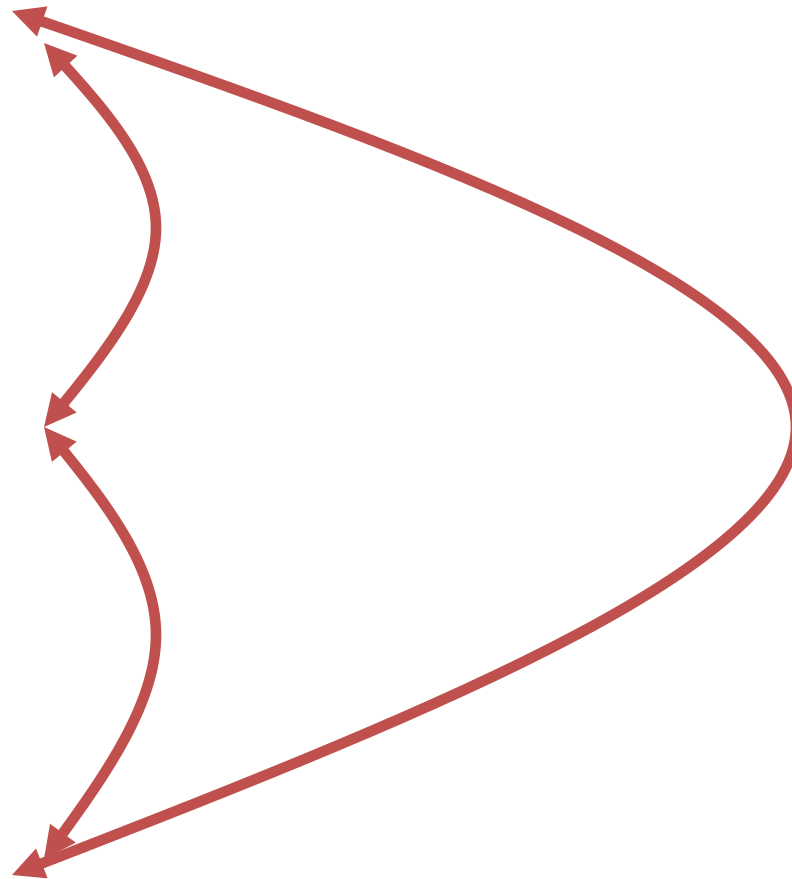
pain  
fatigue  
constipation  
nausea  
dyspnea

## Psychological symptoms:

fear  
hopelessness  
aggression  
grief  
depression  
resignation

## Sociological issues:

family  
housing  
communication  
finances



# A few examples of rigorous studies

# Individualised herbal medicine for reducing toxicity of chemotherapy

<u>Design:</u>	RCT
<u>Sample:</u>	120 patients with early breast or colon cancer undergoing chemotherapy
<u>Intervention:</u>	A) Individualised herbal mixtures prescribed by 3 Chinese herbalists B) Placebo
<u>Primary endpoint:</u>	Toxicity of chemotherapy
<u>Result:</u>	No inter-group differences

# Yoga in palliative cancer care

Design: RCT

Sample: 88 breast cancer patients (India)

Intervention: 1) Yoga  
2) "brief supportive therapy"

Result: Compared to control, yoga was associated with:

- improvement in positive affect
- better emotional function
- less negative affect

# Aromatherapy for palliative cancer care

<u>Design:</u>	RCT
<u>Sample:</u>	46 cancer patients in palliative care (UK)
<u>Intervention:</u>	A) weekly aromatherapy + standard care B) standard care alone
<u>Result:</u>	Mood, QoL improved in both groups With no inter-group difference  Patients were more satisfied with A)

# Music therapy for cancer patients

Design: RCT

Sample: 69 patients having autologous stem cell transplantation for haematologic cancers

Intervention: Regular music therapy given by a trained music therapist or standard care only

Result: 28% lower score on combined Anxiety/Depression scale ( $p=0.065$ ) and 37% lower score on total mood disturbance ( $p=0.01$ )

Beware of  
cherry-pickers!

# Own systematic reviews: AM for cancer

Therapy	Symptom	Number of studies	Conclusion (quote)	Reference
Acupuncture	Pain	7	...the notion that acupuncture may be an effective analgesic adjunctive...is <b>not</b> supported by the data...	Eur J Pain 2005
Acupuncture	Hot flushes (breast cancer)	3	...the evidence is <b>not</b> convincing	Breast Cancer Res Treat 2008
Acupuncture	Hot flushes (prostate cancer)	6	...the evidence is <b>not</b> convincing	Supp Care Cancer 2009
Co-enzyme Q10	Side-effects of conv. Therapy	6	...CoQ10 <b>provides some protection</b> against cardio toxicity or liver toxicity during cancer treatment	J Clin Oncol 2004
Guided imagery	Any symptom	6	...GI... <b>may be</b> psycho-supportive and increase comfort	Psychooncol 2005

# Own systematic reviews: AM for cancer

Therapy	Symptom	Number of studies	Conclusion (quote)	Reference
Homeopathy	Any symptom	6	...insufficient evidence to support clinical efficacy...	Eur J Cancer 2006
Massage	Any symptom	14	...the evidence is encouraging	Supp Care Cancer 2009
Moxibustion	Any symptom	5	The evidence is limited...	BMC Cancer 2010
Tai Chi	Any symptom	4	The evidence is not convincing...	Supp Care Cancer 2009
Tai Chi	Breast cancer symptoms	7	...the existing trail evidence [is]...not convincing	Breast Cancer Res Treat 2010
Qigong	Any symptom	9	...the effectiveness...is not supported by the evidence from rigorous clinical trials	Acta Oncol 2007

# Systematic review: massage for cancer palliation and supportive care

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Sample: 14 RCTs

Results:

- Most studies were of poor methodological quality
- All suggest positive effects, e.g. on:
  - pain
  - nausea
  - anxiety
  - depression
  - anger
  - stress
  - fatigue

# AM for palliative cancer care

treatment	weight of evidence	direction of evidence
acupuncture	000	↑nausea ↗ pain
biofeedback	00	↗
hypnosis	00	↗
massage	000	↗
melatonin	0	↗
moxibustion	00	→
music therapy	0	↗
relaxation	0	↑
therap. touch	0	↗
Co Q10	00	↗
homeopathy	00	↘
tai chi	00	↗
qigong	00	↘

**Take home message:  
(supportive/palliative care)**

**AM is under-researched  
but might have a lot to  
offer**

# CONCLUSION

"AM, like conventional medicines, should be subject to careful evaluation of their effectiveness and safety. It is important that treatments...are properly tested and that patients do not receive misleading information...NHS provision for AM...should be confined to treatments that are supported by...evidence of both effectiveness and safety"



Email: [Edzard.Ernst@pms.ac.uk](mailto:Edzard.Ernst@pms.ac.uk)  
Website: [www.pms.ac.uk/compmed](http://www.pms.ac.uk/compmed)